

# As France reopens, just 4.4% of population infected by coronavirus—well below herd immunity threshold

May 14 2020, by Bob Yirka

---



Credit: CC0 Public Domain

An international team of researchers has found that just 4.4 percent of

people in France have been infected with the SARS-CoV-2 virus—a percentage far below that needed for herd immunity. In their paper published in the journal *Science*, the group describes their study of hospital and surveillance data and what it showed.

As the global pandemic continues to spread around the globe, many nations have begun to grapple with the issue of when to ease lockdown restrictions put in place to slow the spread of COVID-19. Such restrictions were enacted to "flatten the curve" to prevent hospitals and other healthcare facilities from being overrun. But such restrictions have led to [economic problems](#)—business closings, layoffs and slowing of sales—which have sent many countries into recession. And as medical scientists have warned that a vaccine or even an [effective treatment](#) for the disease may be a year or more in the future, world leaders have come under pressure to lift restrictions now—and many have relented. On May 11, many of the restrictions in France were lifted, allowing people to return to work, albeit with new rules in place, such as social distancing.

As countries including France have begun lifting restrictions, medical scientists have begun to speak out about the problems that could result if the restrictions are lifted too quickly. They note that in the absence of a vaccine, the only way out of the pandemic is through [herd immunity](#), in which enough people carry antibodies that the virus burns itself out (assuming those with the antibodies truly are immune). Most scientists agree that [herd](#) immunity occurs when approximately 65 to 75% of a population has been infected. In this new effort, the researchers have found that France is still very far away from herd immunity, and therefore faces a likely second wave of infections as restrictions are eased.

The work by the team involved analyzing COVID-19 related hospital records, surveillance data from hospitals, and data from the cruise ship *Diamond Princess*. The analysis showed that just 3.6 percent of those

infected with the SARS-CoV-2 virus required hospitalization, and just 0.7 of such patients died. They also found the lockdown reduced the transmission rate by 78%, and that just 4.4 percent of the country's population has been infected—very far below the threshold for herd immunity.

**More information:** Henrik Salje et al. Estimating the burden of SARS-CoV-2 in France, *Science* (2020). [DOI: 10.1126/science.abc3517](https://doi.org/10.1126/science.abc3517)

© 2020 Science X Network

Citation: As France reopens, just 4.4% of population infected by coronavirus—well below herd immunity threshold (2020, May 14) retrieved 23 January 2023 from <https://medicalxpress.com/news/2020-05-france-reopens-population-infected-coronaviruswell.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.